



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

perichin

RBW1205G00332-3G

Job Sheet 190643



Part No: RBW1205G00332-3G **Job Qty:** 2 pcs

Part Name: Main Gear Box Oil Draining Hose



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 2/12/19

Job Tracking No: SIOP

Due Date: 3/12/19

Created By: Dara Macdonald

Type: Stock

Description:

Note: DWG RBW1205G00332-3G Rev 6 IPP Rev A 18.02.15 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Small Fab - 1	2 pcs	3/12/19		0.00	2.67	Small Fab - 1		<i>MCC</i>
							Small Fab - 2		
							Small Fab - 3		
							Small Fab - 4		
							Small Fab - 5		
							Small Fab - 6		
							Small Fab - 7		
110	QC 5	2 pcs	3/12/19		0.00	0.00	QC 5 - 10		<i>338 19/02/19</i>
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 42		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
130	Packaging 3-1 - Stock - B4B	2 pcs	3/12/19		0.00	0.00	Packaging 3 - 1 - B4B		<i>DAS 28 0-88</i>
							Packaging 3 - 2 - B4B		
							Packaging 3 - 3 - B4B		
							Packaging 3 - 4 - B4B		
							Packaging 3 - 5 - B4B		
							Packaging 3 - 6 - B4B		



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S154524



Part: RBW1205G00332-3G

Job No: 190643

Serial No/Batch: S154524

Revision: 6

Inspector:

Exp Date:

Instructions:

Date: 02/19/19

		Packaging 3 - 7 - B4B						
		Packaging 3 - 8 - B4B						
		Packaging 3 - 9 - B4B						
		Packaging 3 - 10 - B4B						
		Packaging 3 - 11 - B4B						
		Packaging 3 - 12 - B4B						
		Packaging 3 - 13 - B4B						
		Packaging 3 - 14 - B4B						
		Packaging 3 - 15 - B4B						
		Packaging 3 - 16 - B4B						
		Packaging 3 - 17 - B4B						
		Packaging 3 - 18 - B4B						
		Packaging 3 - 19 - B4B						
		Packaging 3 - 20 - B4B						
		Packaging 3 - 21 - B4B						
		Packaging 3 - 22 - B4B						
		Packaging 3 - 23 - B4B						
		Packaging 3 - 24 - B4B						
		Packaging 3 - 25 - B4B						
		Packaging 3 - 26 - B4B						
		Packaging 3 - 27 - B4B						
		Packaging 3 - 28 - B4B						
		Packaging 3 - 29 - B4B						
		Packaging 3 - 30 - B4B						
		Packaging 3 - 31 - B4B						
		Packaging 3 - 32 - B4B						
		Packaging 3 - 33 - B4B						
		Packaging 3 - 34 - B4B						
		Packaging 3 - 35 - B4B	DAG					
		Packaging 3 - 36 - B4B	21					
		140	QC 21 - FG	2 pcs	3/12/19	0.00 0.00	QC 21 - FG - 21	9-89 FEB 19 2019
							QC 21 - FG - 70	
							QC 21 - SA - 53	

Part Op **100** - Small Fab - 1-Cut 9657k135 (-25) spring to 0.5" as per work order deviation 2-Assemble as per DWG sheet 1.
 Descriptions: Install a 1.0" long, 0.38" OD, 0.25" ID piece of Stainless Steel into one end of the Kuri-Tech Hose until flush. Attach the modified end of the Kuri-Tech Hose to the Coupling before placing tool into packaging (if applicable).

110 - QC5- Inspect part completeness to step on W/O

130 - Identify as per dwg & Stock Location: _____

140 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
1315	Crimp Hose Clamp 9/16"	2 pcs (1 ea)	100-Small Fab - 1	3038400
2619	Spring Rnd 3/4"	2 Ea (1 ea)	100-Small Fab - 1	3075095
4464T123	O-Ring 9/16 Od X 1/16 Cross	2 Ea (1 ea)	100-Small Fab - 1	3048577
91665A350	Retaining Ring, 7/16" Shaft	2 Ea (1 ea)	100-Small Fab - 1	3046064
K010-0608	Hose Ø1/2 OD x Ø3/8 ID	12 ft (6 ea)	100-Small Fab - 1	3126670
RBW1205G00332-3G-01	Cap	2 pcs (1 ea)	100-Small Fab - 1	3137030
RBW1205G00332-3G-03	Quill	2 pcs (1 ea)	100-Small Fab - 1	3139002
RBW1205G00332-3G-17	Sleeve	2 pcs (1 ea)	100-Small Fab - 1	3136972
RBW1205G00332-3G-19	Barb	2 pcs (1 ea)	100-Small Fab - 1	311A390
RBW1205G00332-3G-21	Valve	2 pcs (1 ea)	100-Small Fab - 1	3137144
RBW1205G00332-3G-23	Screw (Modified B/O)	4 pcs (2 ea)	100-Small Fab - 1	3147938
RBW1205G00332-3G-24	End Cap	2 pcs (1 ea)	100-Small Fab - 1	3137017
9657K135	Spring	2 Ea (1 ea)	100-Small Fab - 1	3047612
M304TR0.375W.065	304 Round Tube .375 X .065W	.1660 ft (.083 ea)	100-Small Fab - 1	

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Small Fab - 1	1315	2	50	0
	2619	2	37	0
	4464T123	2	39	0
	91665A350	2	16	0
	9657K135	2	10	0
	K010-0608	12	455	0
	M304TR0.375W.065	0	60	0
	RBW1205G00332-3G-01	2	11	0
	RBW1205G00332-3G-03	2	15	0
	RBW1205G00332-3G-17	2	7	0
	RBW1205G00332-3G-19	2	13	0
	RBW1205G00332-3G-21	2	12	0
	RBW1205G00332-3G-23	4	7	0
	RBW1205G00332-3G-24	2	11	0
Part Specifications				
Specifications could not be found.				

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

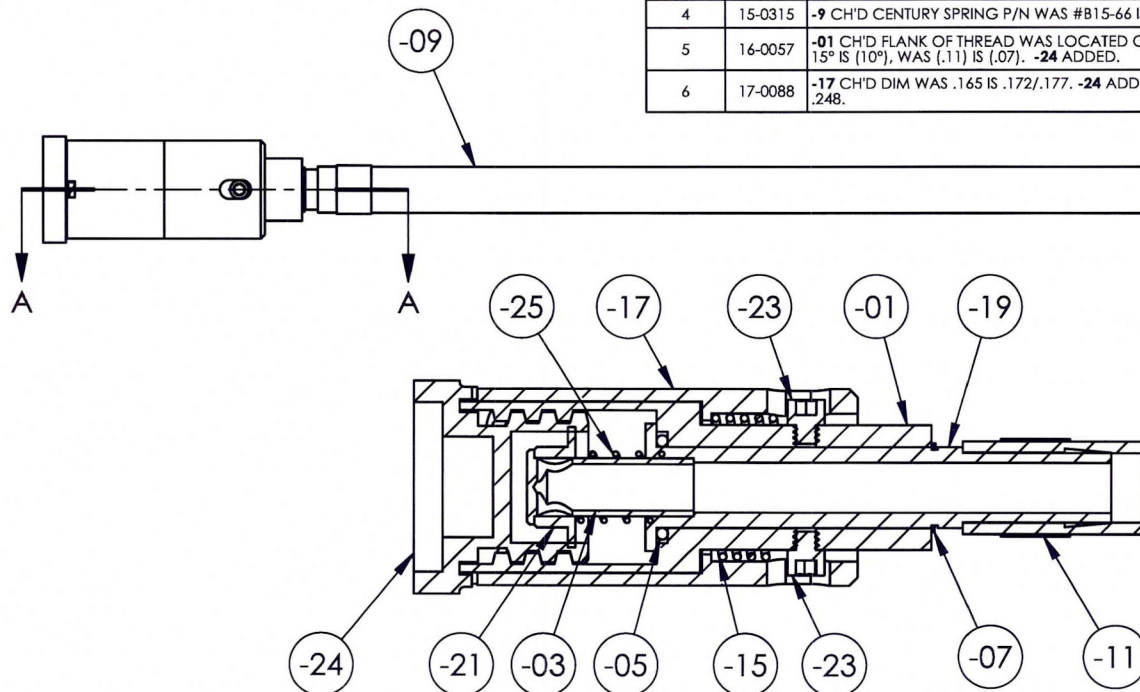
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: <u>190643</u> Part No. <u>RBW1205G00332-3G-25</u> NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																																																																				
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																																																				
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																																																																				
Large Fab ☐	Composite ☐	Supplier ☐																																																																					
Date : _____		Step #: _____		QTY Effective : _____		MRB (QSI042) Approval Feb 20, 2018																																																																	
Description Work Order Deviation				Disposition																																																																			
Ried Spring #S1165 can not be procured. Use McMaster Carr 9657K135 Spring cut to a length of 0.5" in place of RBW1205G00332-3G-25 Spring.				- This deviation is acceptable. - The drawings will be updated to reflect these changes. - The fit, form and function of the tool will be as originally intended.																																																																			
								Completed By																																																															
								Lead hand / Supervisor Approval Verification																																																															
				QC / QA Coordinator Approval																																																																			
Root Cause <table style="width:100%;"> <tr><td>Environment ☐</td><td>No Re-verification ☐</td></tr> <tr><td>Design ☐</td><td>Operator ☐</td></tr> <tr><td>Doc/Data ☐</td><td>Offset/Setup ☐</td></tr> <tr><td>Equip/Tooling ☐</td><td>Supplier ☐</td></tr> <tr><td>Handling/Pre ☐</td><td>Training ☐</td></tr> <tr><td>Material ☐</td><td>Use for Testing ☐</td></tr> <tr><td>Internal Transport ☐</td><td>Poor Information ☐</td></tr> <tr><td>Tribal Knowledge ☐</td><td>Rushing ☐</td></tr> <tr><td>LOA ☐</td><td>Product Improvement ☐</td></tr> <tr><td>Substation ☐</td><td>Process Improvement ☐</td></tr> <tr><td>Past Expiry Date ☐</td><td>Manufacturing Process ☐</td></tr> <tr><td>Misidentified ☐</td><td>Past Due ☐</td></tr> </table>				Environment ☐	No Re-verification ☐	Design ☐	Operator ☐	Doc/Data ☐	Offset/Setup ☐	Equip/Tooling ☐	Supplier ☐	Handling/Pre ☐	Training ☐	Material ☐	Use for Testing ☐	Internal Transport ☐	Poor Information ☐	Tribal Knowledge ☐	Rushing ☐	LOA ☐	Product Improvement ☐	Substation ☐	Process Improvement ☐	Past Expiry Date ☐	Manufacturing Process ☐	Misidentified ☐	Past Due ☐	FAULT CATEGORY <table style="width:100%;"> <tr><td>Pressure/Forced ☐</td><td>Temperature/Cure ☐</td><td>Power Loss/Surge ☐</td><td>Positioned Wrong ☐</td></tr> <tr><td>Bending ☐</td><td>Set-up ☐</td><td>Folio/Program ☐</td><td>Outside Dimensions ☐</td></tr> <tr><td>Centre Not Concentric ☐</td><td>BOM/Route ☐</td><td>Grain ☐</td><td>Over/Under tolerance ☐</td></tr> <tr><td>Cracks ☐</td><td>Broken/Damage/Defect ☐</td><td>Weld ☐</td><td>Part Incorrect ☐</td></tr> <tr><td>Crimp/Kink/Ripple/Wave ☐</td><td>Inspection Incomplete/Unqualified ☐</td><td>Wrong Stock Pulled ☐</td><td>Part Lost/Missing ☐</td></tr> <tr><td>Cuffs ☐</td><td>Contamination ☐</td><td>Out of Sequence ☐</td><td>Part Moved ☐</td></tr> <tr><td>Crushing ☐</td><td>Countersink ☐</td><td>Off-set ☐</td><td>Drawing ☐</td></tr> <tr><td>Heat Treat ☐</td><td>Cut Too Short ☐</td><td>Mislabeled ☐</td><td>Finish ☐</td></tr> <tr><td>Wave/Twist in Tube ☐</td><td>Instructions Incomplete/Unclear ☐</td><td>Fit/Function ☐</td><td>Misread ☐</td></tr> <tr><td>Marks/Chatter ☐</td><td>Drill Holes ☐</td><td>Misaligned/off center ☐</td><td>Turning Sequence ☐</td></tr> </table>				Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Environment ☐	No Re-verification ☐																																																																						
Design ☐	Operator ☐																																																																						
Doc/Data ☐	Offset/Setup ☐																																																																						
Equip/Tooling ☐	Supplier ☐																																																																						
Handling/Pre ☐	Training ☐																																																																						
Material ☐	Use for Testing ☐																																																																						
Internal Transport ☐	Poor Information ☐																																																																						
Tribal Knowledge ☐	Rushing ☐																																																																						
LOA ☐	Product Improvement ☐																																																																						
Substation ☐	Process Improvement ☐																																																																						
Past Expiry Date ☐	Manufacturing Process ☐																																																																						
Misidentified ☐	Past Due ☐																																																																						
Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																																																																				
Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																																																																				
Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																																																																				
Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																																																																				
Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																																																																				
Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																																																																				
Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																																																																				
Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																																																																				
Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																																																																				
Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																																																																				
OTHER : _____																																																																							

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		REDESIGNED WITH SHUTOFF AND RETAINING SLEEVE, ADDED PARTS -03, -17, -19, -21 & -23.	3/2/2011	JAG	
2		-01 CH'D TO CLEAR ANODIZE, THREAD CORRECTED TO 13/16-6. -03 CH'D HOLE FROM Ø.20, CH'D LIMIT DIM FROM Ø.3135 - .3139. -17 CH'D TO CLEAR ANODIZE. -19 CH'D HOLE DIA. FROM Ø.26 AND .10 FLANGE TO .06. -21 CH'D Ø.313 TO LIMIT DIM S.F.	11/30/2011	RJC	DW
3		-17 ADDED ENGRAVE NOTE. -23 CH'D O.D. FROM Ø.20 TO Ø.200 +.003 -.000.	2/15/2012	RJC	SE
3A		-13 DELETE, ENGRAVING IS ON -17.	5/2/2013	RJC	RJC
4	15-0315	-9 CH'D CENTURY SPRING P/N WAS #B15-66 IS #2619.	9/30/2015	RJC	JAG
5	16-0057	-01 CH'D FLANK OF THREAD WAS LOCATED ON CENTERLINE IS OFFSET 13° FROM CENTERLINE; WAS 15° IS (10°), WAS (.11) IS (.07). -24 ADDED.	6/16/2016	SM	JAG
6	17-0088	-17 CH'D DIM WAS .165 IS .172/.177. -24 ADDED DIM'S .696, Ø1.09, MIN. R. DELETED DIM'S 2X .068, .248.	4/17/2017	RJC	JAG



SECTION A-A
SCALE 1 : 1

NOTE:
FUNCTION: PART OF HELICOPTER SERVICING KIT PART No 3G1205G00131. USED TO DRAIN OIL FROM THE MGB THROUGH THE PARKER STRATOFLEX COUPLING, RBW1205G00332-3G REPLACES STRATOFLEX (11362) (A3Q07) P/N 165006.

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-01	1	CAP	6061		2
			-03	1	QUILL	303/304 S.S.		3
		B/O	-05	1	O-RING	BURNA-N	9/16 OD X 1/16 CROSS (MCMASTER-CARR #4464T123)	1
		B/O	-07	1	EXTERNAL RETAINING RING	SPRING STEEL	Ø7/16 SHAFT MCMASTER-CARR #91665A350	1
		B/O	-09	1	HOSE	VINYL	Ø1/2 X 3/8 X 6 FT. KURI-TECH #K010-0608	1
		B/O	-11	1	CRIMP HOSE CLAMP	S.S.	Ø1/2 DIXON VALVE #OET-1315	1
		B/O	-15	1	SPRING	SPRING STEEL	Ø3/4 CENTURY SPRING #2619	1
			-17	1	SLEEVE	6061		4
			-19	1	BARB	303/304 S.S.		5
			-21	1	VALVE	303/304 S.S.		6
			-23	2	SCREW	S.S.	6-32 X 1/8 (MCMASTER-CARR #92196A139) MODIFIED	7
			-24	1	END CAP	6061		8
		B/O	-25	1	SPRING	MUSIC WIRE	Ø.028 WIRE: Ø.360 OD X .5 FREE LENGH RIED #S1165	1

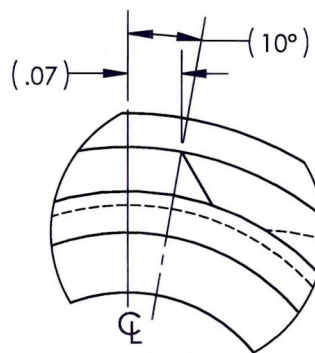
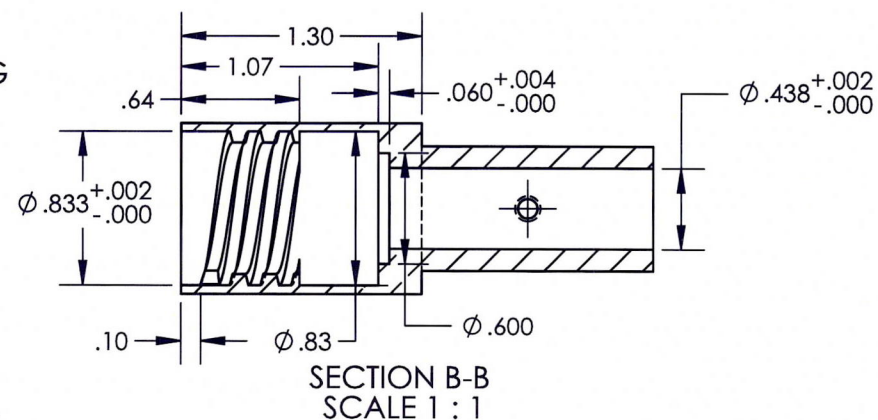
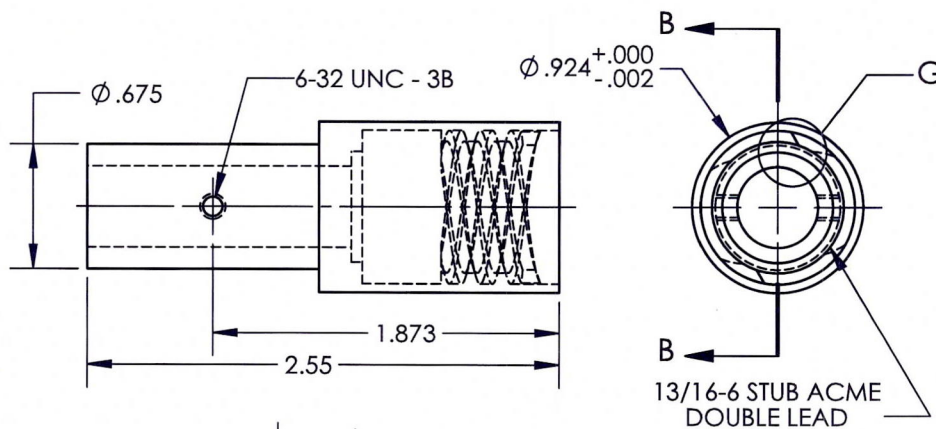
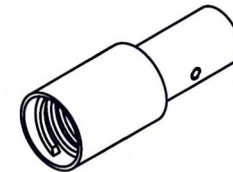
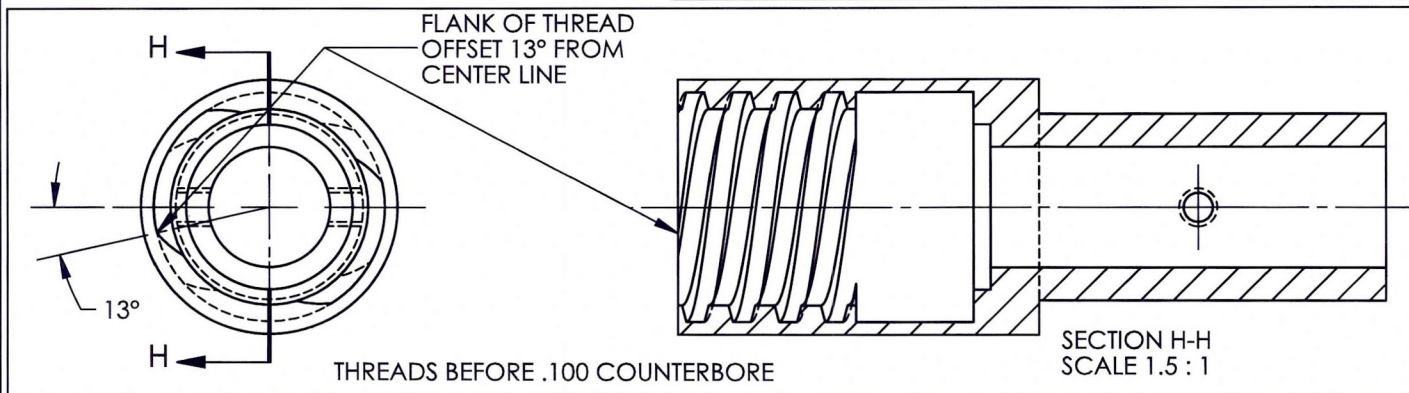
DART
AEROSPACE

MAIN GEAR BOX DRAIN TOOL

DWG NO.	RBW1205G00332-3G	REV	6
MAT'L	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		
FEAT	.XXX ± .005	FRACTIONS ± 1/8	
TREAT	.XX ± .01	ANGLES ± 5°	
FINISH	.X ± .1	SURFACES = 125/	
SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R		
DRAWN BY:	PERRITT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
CHECKED:	DUERFELDT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
OPPS APPR:	ANDERSON	USED ON MODEL	
QA APPR:	LINDSAY	AGUSTA	
APPROVED:	GILBERT		
SCALE	1:2	DATE	2/23/2011
		SHEET 1 OF 8	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		REDESIGNED TO USE WITH SLEEVE.	3/2/2011	JAG	
2		-01 CH'D TO CLEAR ANODIZE, THREAD CORRECTED TO 13/16-6.	12/20/2011	RJC	DW
5	16-0057	-01 CH'D FLANK OF THREAD WAS LOCATED ON CENTERLINE IS OFFSET 13° FROM CENTERLINE; WAS 15° IS (10°), WAS (.11) IS (.07).	6/16/2016	SM	JAG



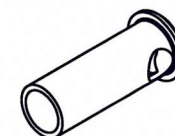
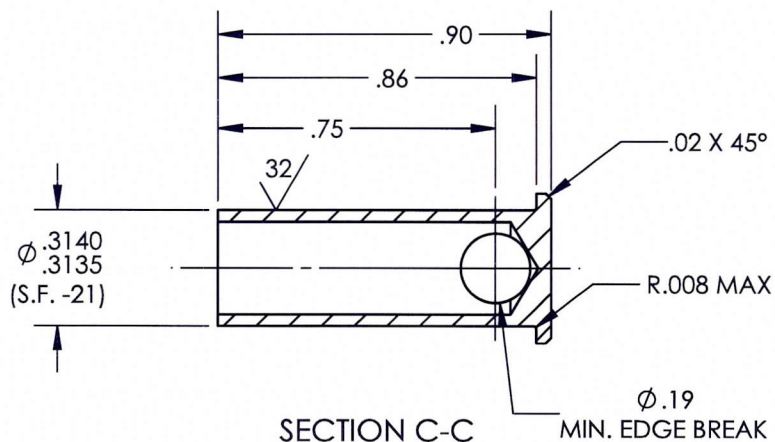
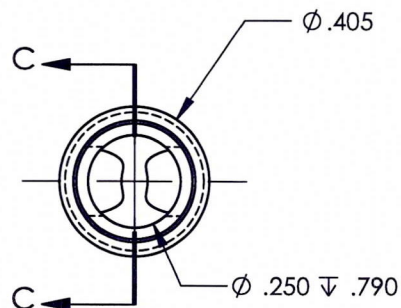
REMOVE THREAD START TO FULL THREAD WIDTH AS SEEN IN ISO

(-01)
CAP

DART AEROSPACE	
TITLE MAIN GEAR BOX DRAIN TOOL	
DWG NO. RBW1205G00332-3G-01	REV 6
MAT'L 6061	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH CLEAR ANODIZE	.XXX ± .005 FRACTIONS ± 1/8
SPEC MIL-A-8625, TYPE II, CLASS I	.XX ± .01 ANGLES ± 5°
	X ± .1 SURFACES = 125/√
DRAWN BY: PERRITT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	AGUSTA
SCALE 1:1	DATE 2/23/2011
SHEET 2 OF 8	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-03 ADDED THIS PART FOR REDESIGN.	3/2/2011	JAG	
2		-03 CH'D HOLE FROM Ø.20, CH'D LIMIT DIM FROM Ø.3135-.3139.	11/30/2011	RJC	DW



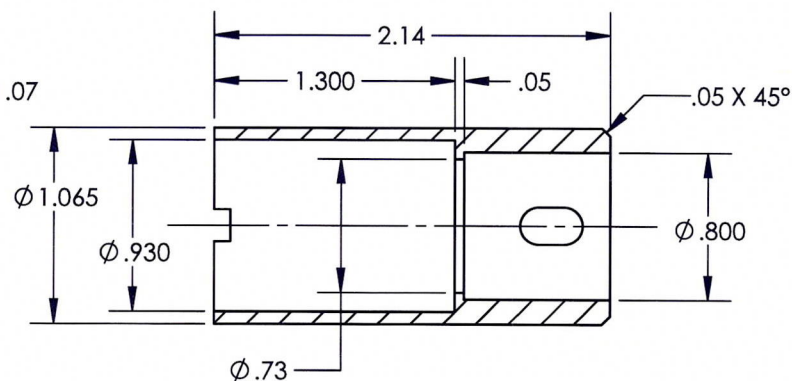
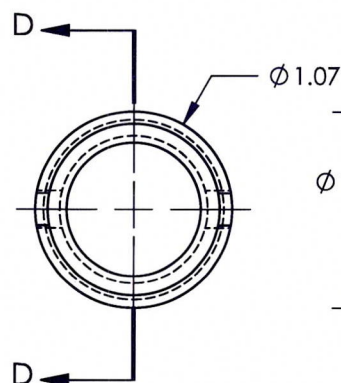
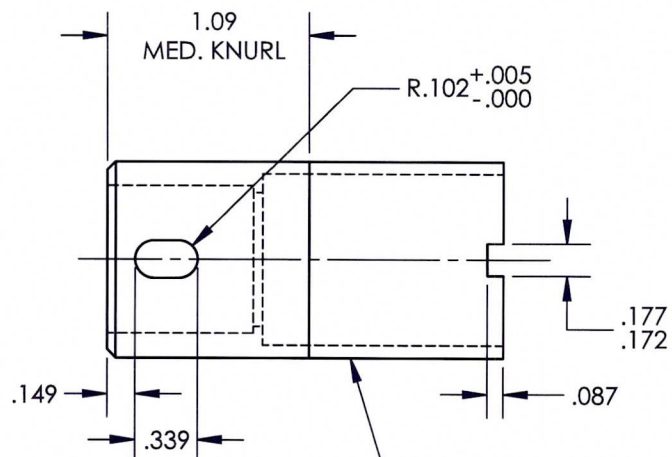
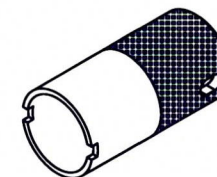
(-03)

QUILL

DART AEROSPACE	
TITLE MAIN GEAR BOX DRAIN TOOL	
DWG NO. RBW1205G00332-3G-03	REV 6
MAT'L 303/304 S.S.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT	.XXX ± .005 FRACTIONS ± 1/8
TREAT	.XX ± .01 ANGLES ±.5°
FINISH	.X ± .1 SURFACES = 125/√
SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
DRAWN BY: PERRITT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
CHECKED: DUERFELDT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	AGUSTA
SCALE 2:1	DATE 2/23/2011 SHEET 3 OF 8

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-17 ADDED THIS PART FOR REDESIGN.	3/2/2011	JAG	
2		-17 CH'D TO CLEAR ANODIZE.	11/30/2011	RJC	DW
3		-17 ADDED ENGRAVE NOTRE.	2/15/2012	RJC	SE
6	17-0088	-17 CH'D DIM WAS .165 IS .172/.177.	4/17/2017	RJC	JAG



SECTION D-D

ENGRAVE T/N, S/N,
"MADE IN USA"

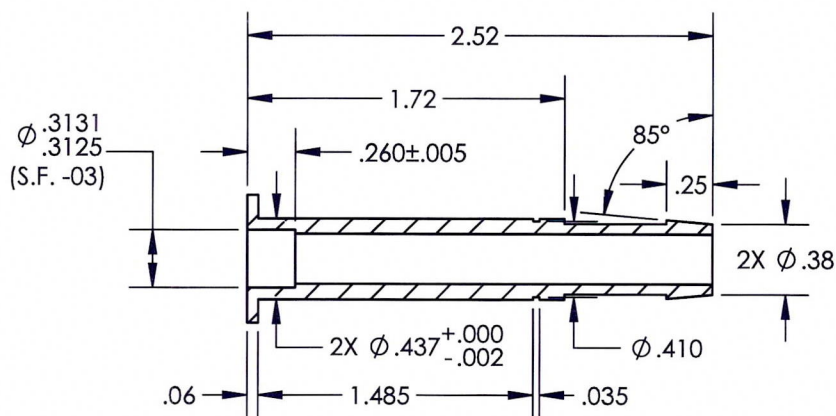
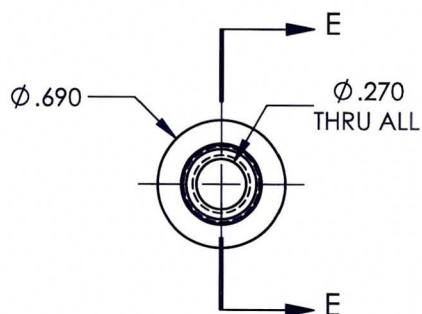
(-17)

SLEEVE

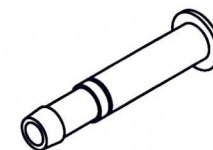
DART AEROSPACE	
TITLE MAIN GEAR BOX DRAIN TOOL	
DWG NO. RBW1205G00332-3G-17	REV 6
MAT'L 6061	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT FINISH CLEAR ANODIZE	.XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125/√
SPEC MIL-A-8625, TYPE II, CLASS I	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
DRAWN BY: PERRITT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
CHECKED: DUERFELDT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
OPPS APPR: ANDERSON	USED ON MODEL
QA APPR: LINDSAY	AGUSTA
APPROVED: GILBERT	
SCALE 1:1	DATE 2/23/2011 SHEET 4 OF 8

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-19 ADDED THIS PART FOR REDESIGN.	3/2/2011	JAG	
2		-19 CH'D HOLE DIA. FROM Ø.26, CH'D .10 FLANGE DIM TO .06.	11/30/2011	RJC	DW



SECTION E-E



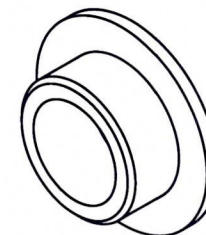
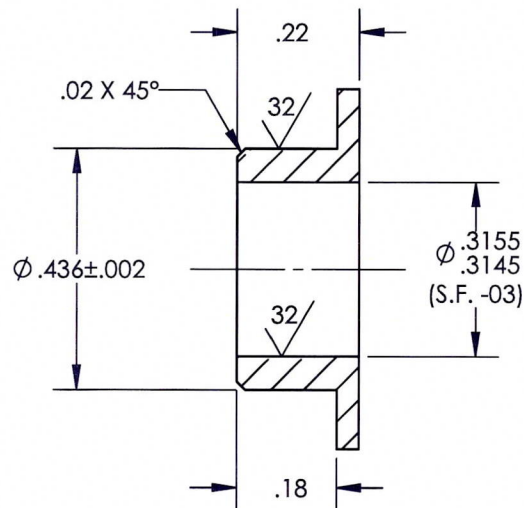
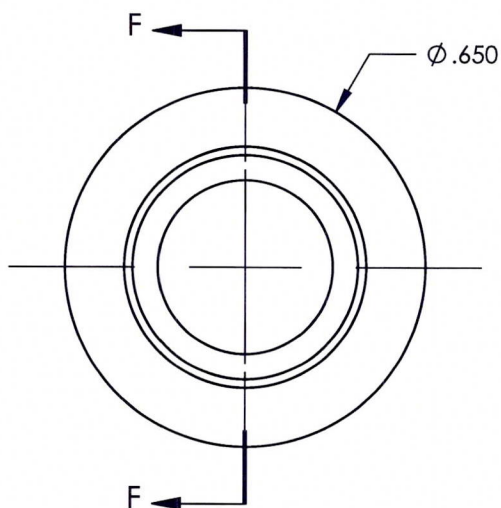
(-19)

BARB

DART AEROSPACE	
TITLE MAIN GEAR BOX DRAIN TOOL	
DWG NO. RBW1205G00332-3G-19	REV 6
MAT'L 303/304 S.S.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT	.XXX ± .005 FRACTIONS ± 1/8
TREAT	.XX ± .01 ANGLES ± .5°
FINISH	.X ± .1 SURFACES = 125/√
SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
DRAWN BY: PERRITT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
CHECKED: DUERFELDT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	AGUSTA
SCALE 1:1	DATE 2/22/2011 SHEET 5 OF 8

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-21 ADDED THIS PART FOR REDESIGN.	3/2/2011	JAG	
2		-21 CH'D Ø.313 TO LIMIT DIM. S.F. -3.	11/30/2011	RJC	DW



SECTION F-F

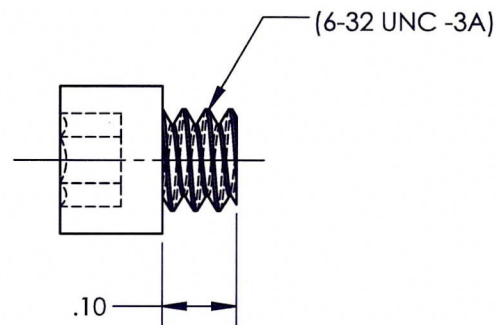
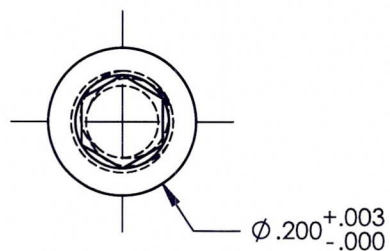
(-21)

VALVE

DART AEROSPACE	
TITLE MAIN GEAR BOX DRAIN TOOL	
DWG NO. RBW1205G00332-3G-21	REV 6
MAT'L 303/304 S.S.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	XXX ± .005 FRACTIONS ± 1/16
FINISH	XX ± .01 ANGLES ± .5°
SPEC	X ± .1 SURFACES = 125/√
DRAWN BY: PERRITT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	AGUSTA
SCALE 3:1	DATE 2/25/2011
SHEET 6 OF 8	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-23 ADDED THIS PART FOR REDESIGN.	3/2/2011	JAG	
3		-23 CH'D O.D. FROM Ø.20 TO Ø.200 +.003-.000.	2/15/2012	RJC	SE



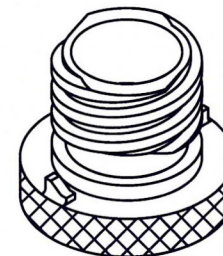
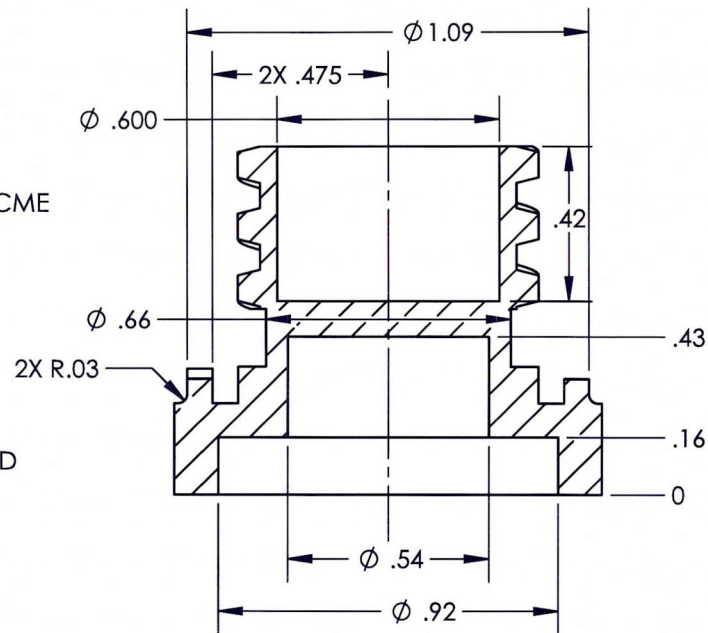
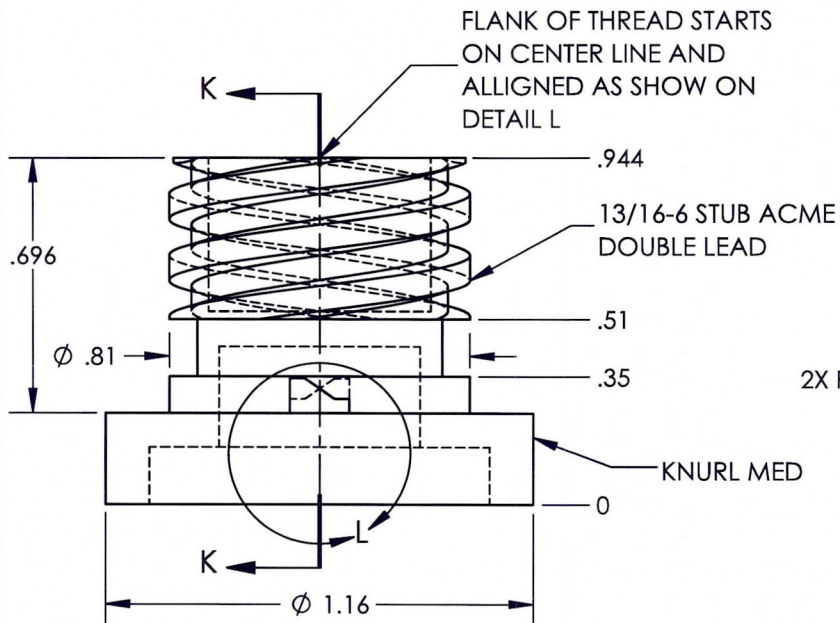
(-23)

SCREW

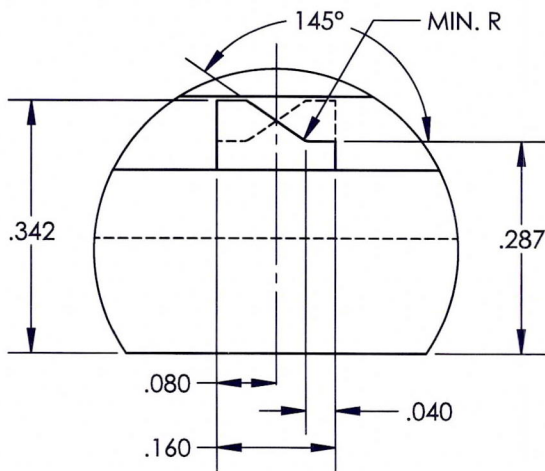
DART AEROSPACE	
TITLE MAIN GEAR BOX DRAIN TOOL	
DWG NO. RBW1205G00332-3G-23	REV 6
MAT'L S.S.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT	.XXX ± .005 FRACTIONS ± 1/8
TREAT	.XX ± .01 ANGLES ± 5°
FINISH	.X ± .1 SURFACES = 125/√
SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
DRAWN BY: GILBERT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
CHECKED: DUERFELDT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	AGUSTA
SCALE 4:1	DATE 2/22/2011 SHEET 7 OF 8

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
5	16-0057	-24 ADDED.	6/16/2016	SM	JAG
6	17-0088	-24 ADDED DIM'S .696, Ø1.09, MIN. R. DELETED DIM'S 2X .068, .248.	4/17/2017	RJC	JAG



SECTION K-K



DETAIL L
2 PLACES
SCALE 4 : 1

(-24)

END CAP

DART AEROSPACE	
TITLE MAIN GEAR BOX DRAIN TOOL	
DWG NO. RBW1205G00332-3G-24	REV 6
MAT'L 6061	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .005 FRACTIONS ± 1/8
FINISH BLACK ANODIZE	.XX ± .01 ANGLES ± .5°
SPEC MIL-A-8625F, TYPE II, CLASS II	X ± .1 SURFACES = 125/✓
DRAWN BY: MACKOVJAK	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	AGUSTA
SCALE 2:1	DATE 6/16/2016
SHEET 8 OF 8	